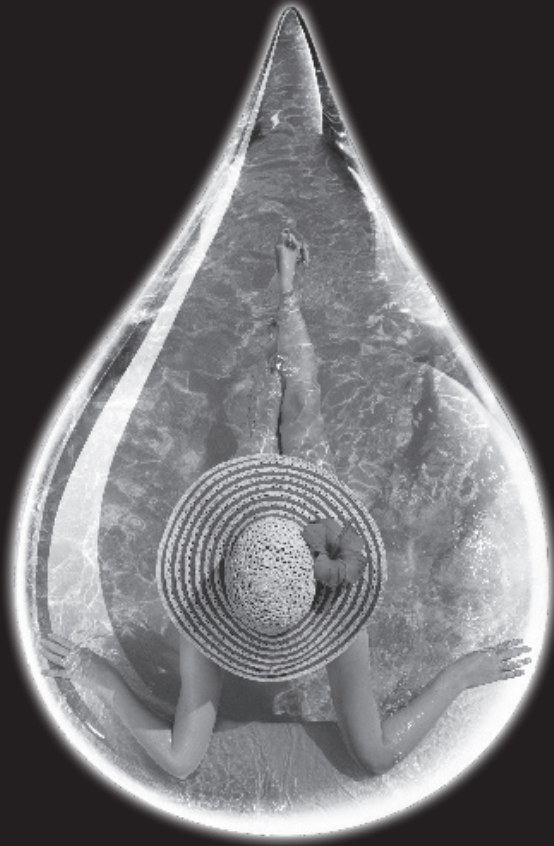


H.R.UV-C

with Intelligent LED Lamp Life Indicator

Installation & Operating Manual



ELECRO
ENGINEERING

Important Notes

Congratulations on purchasing the H.R.UV-C pool sanitising system, the latest in high reflection UV technology, manufactured in England to the highest standards.

To ensure your new product will give years of trouble free service **please carefully read the following instructions.**

Incorrect installation will affect your warranty. Do not discard this manual, please retain for future reference.

Important safety information

- Consult a qualified electrician
- Never look directly at an illuminated UV lamp
- Do not run this unit dry, do not cover this unit
- Always isolate the unit from mains electricity and turn off the water supply before carrying out maintenance
- Always disconnect all pool appliances from the mains electricity supply before servicing
- Power must be supplied through a Residual Current Device (RCD) with a rated residual operating current not exceeding 30mA
- This unit must be earthed. Never use a higher rated fuse than specified
- The unit must not be submerged in water
- If the quartz sleeve is cracked, replace it immediately
- Young children should always be supervised near water

Specification

Model: E-PP2-55 & E-PP2-110

Rating: 220~240V 50/60Hz; or 110~120V 50/60Hz

MAX Pressure = 3 Bar

This unit is manufactured in conformance with:

Safety: BS EN 60335-1:2002. BS EN 60335-2-55:2003

EMC: EN 55015: 2000. EN 61000-3-2: 2000 EN 61000-3-3: 1995.

EN61547:1995

This unit is CE approved.

Product Overview

The H.R.UV-C is available in 55W single tube and 110W double tube formats, supplied complete with intelligent LED lamp life indicator.

55W Single Tube Unit

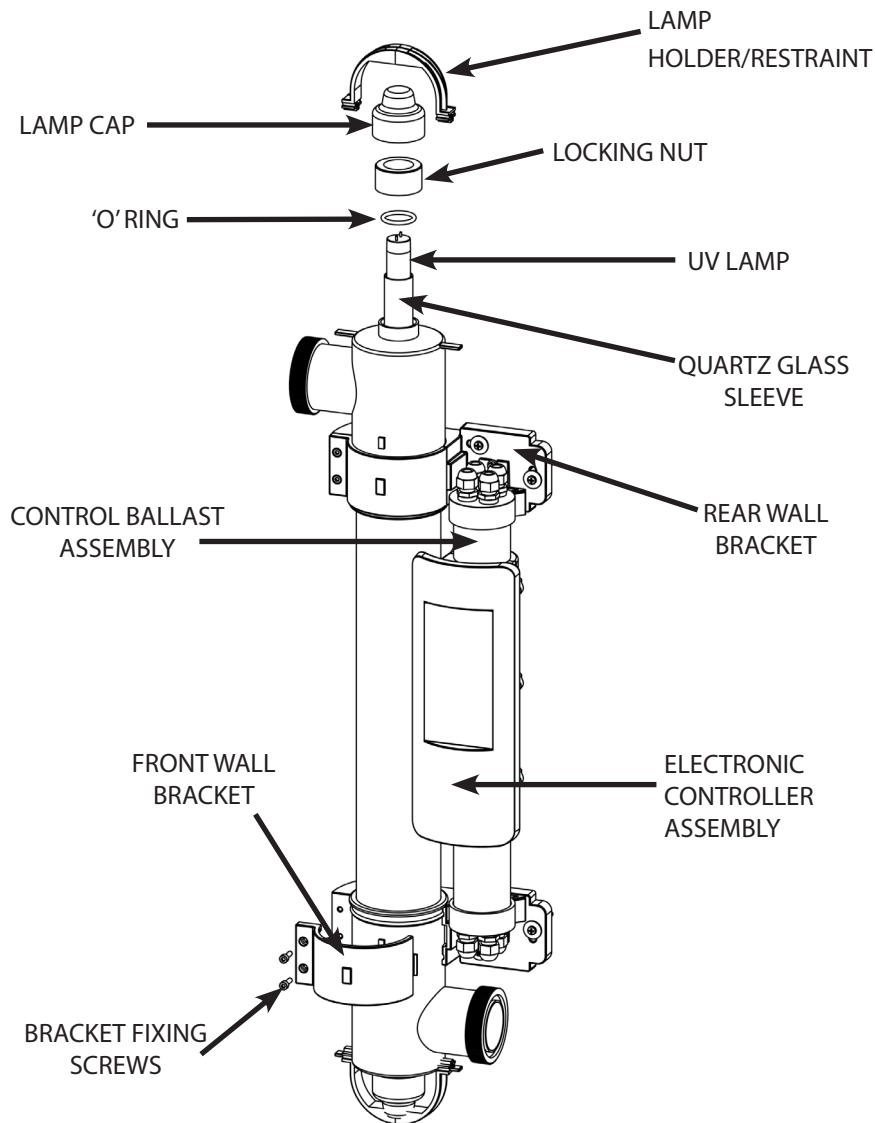


Fig 1.

110W Double Tube Unit

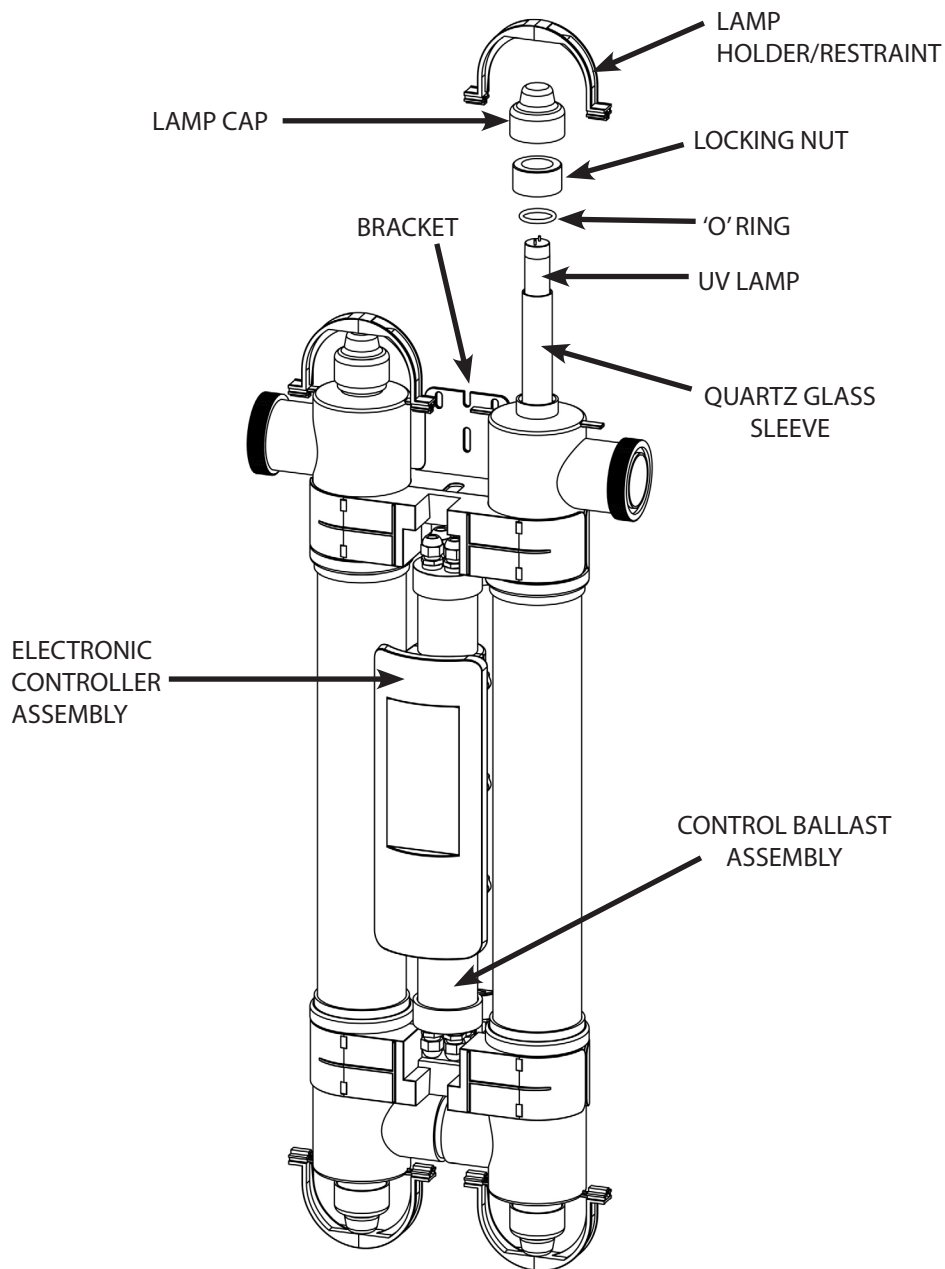


Fig 2.

Positioning the Unit

CAUTION: To prevent this unit falling into water, do not install above or alongside your pool.

The H.R.UV-C unit is weatherproof but not waterproof; it must be installed in a dry weatherproof enclosure. The unit must be mounted on a flat vertical surface horizontally or vertically. It must not be submerged in water or placed in a position where water may collect around the unit.

To prevent the unit inadvertently being dropped into the pool, the unit must be installed at least 3.5 metres from the edge of the pool.

The unit must always be plumbed into the water system after the filter as shown in fig 3. to prevent dirt and debris being pumped into the unit.

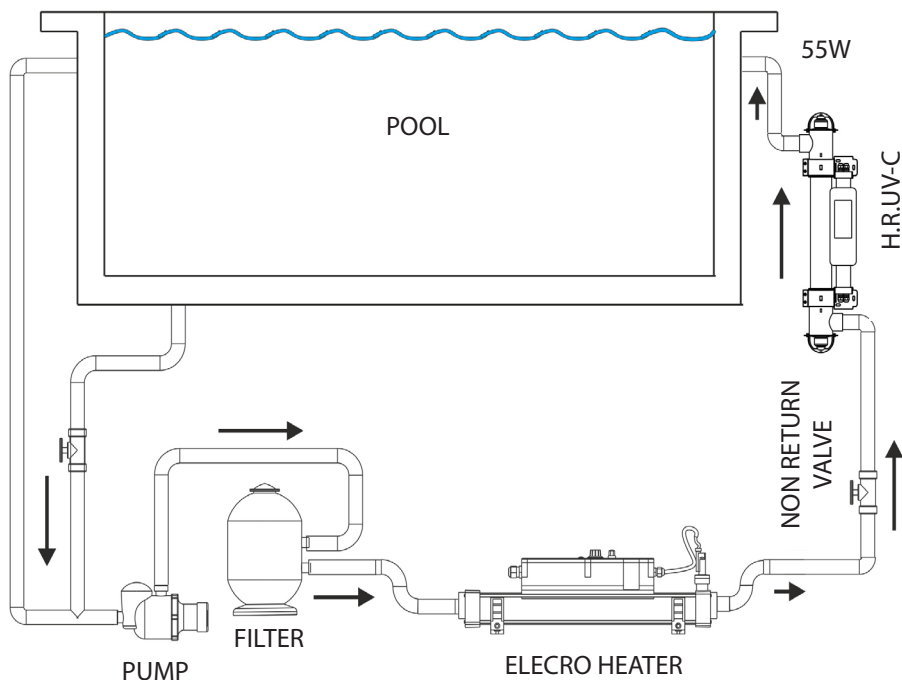


Fig 3.

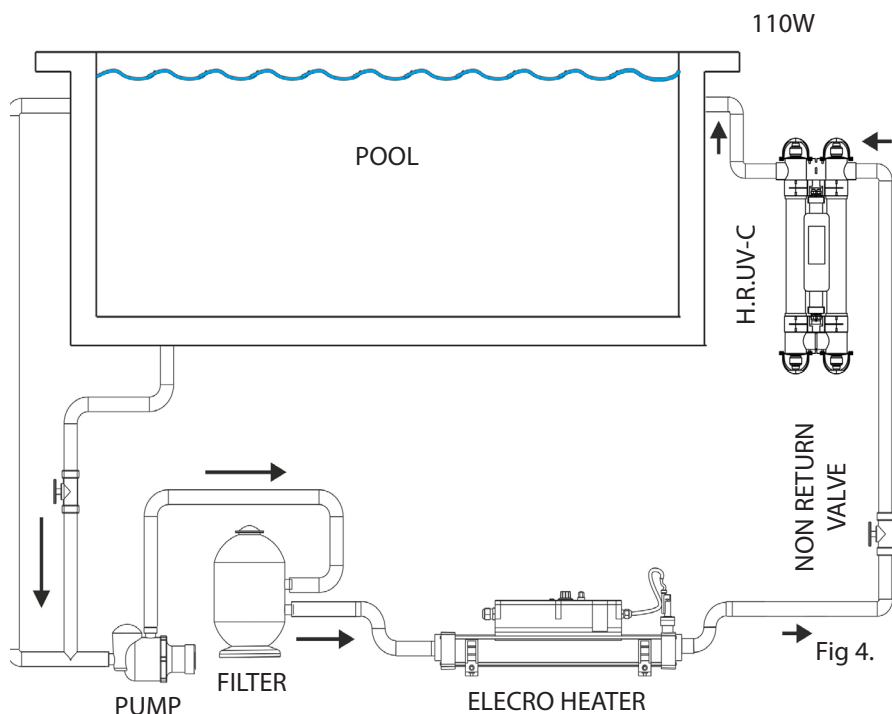


Fig 4.

Mounting the UV Unit

The unit may be mounted on a wall or other suitable vertical surface that is structurally strong enough (for example: when full of water the unit is too heavy to mount onto a conventional wooden fence panel). The unit is supplied with a fixing kit. The unit can be mounted vertically as shown in the next pages in fig 5. and 6. or horizontally as shown in fig 7.

NOTE!

When mounting the UV it is essential to leave a clearance space of at least 1 metre from one side of the unit to allow access to replace the lamp(s) and/or quartz sleeve(s) when required. Both the lamps and the quartz sleeve can be replaced from either end of the unit; if installing vertically the 1 metre clearance space must be above or below the unit, if installing horizontally the 1m clearance space must be to the left or right of the unit.

55W Single Tube Unit

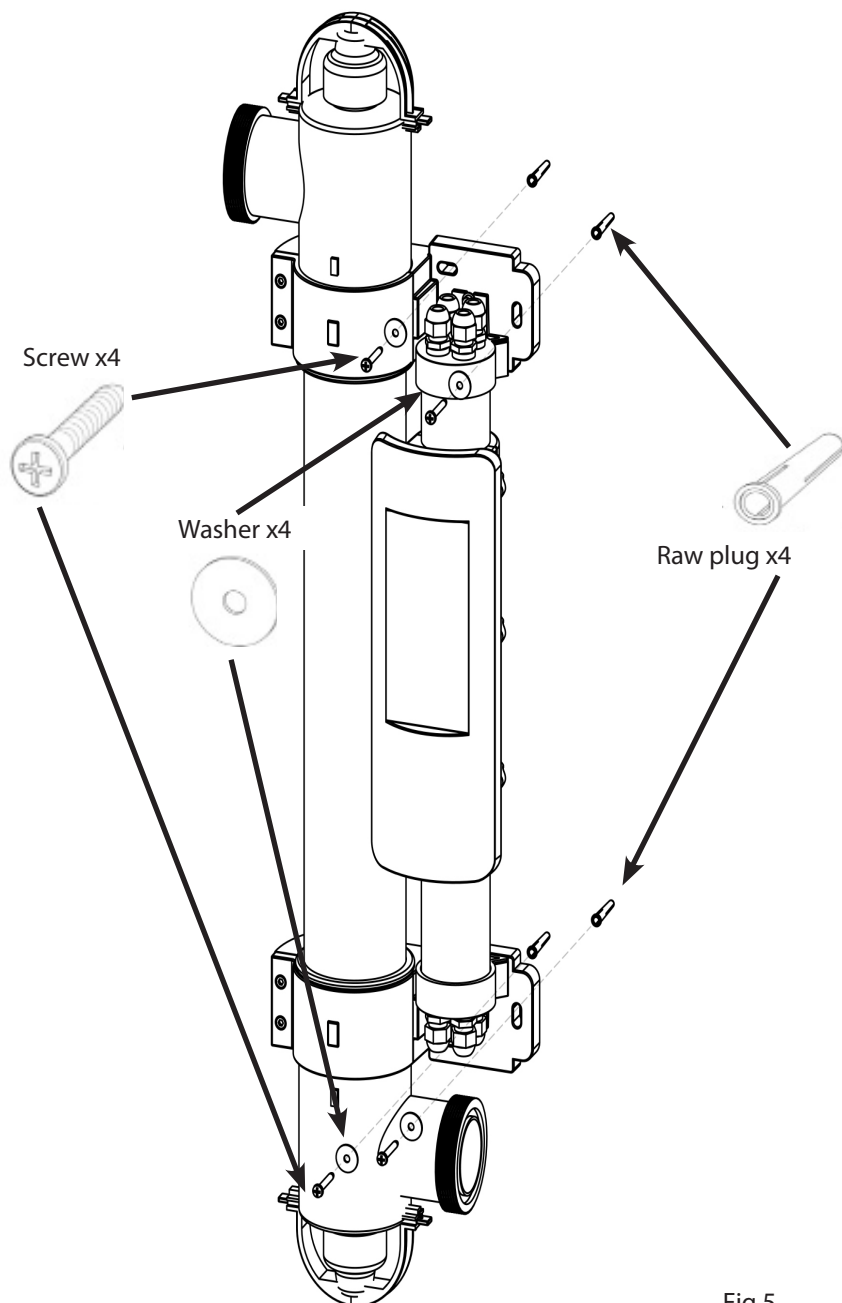


Fig 5.

110W Double Tube Unit

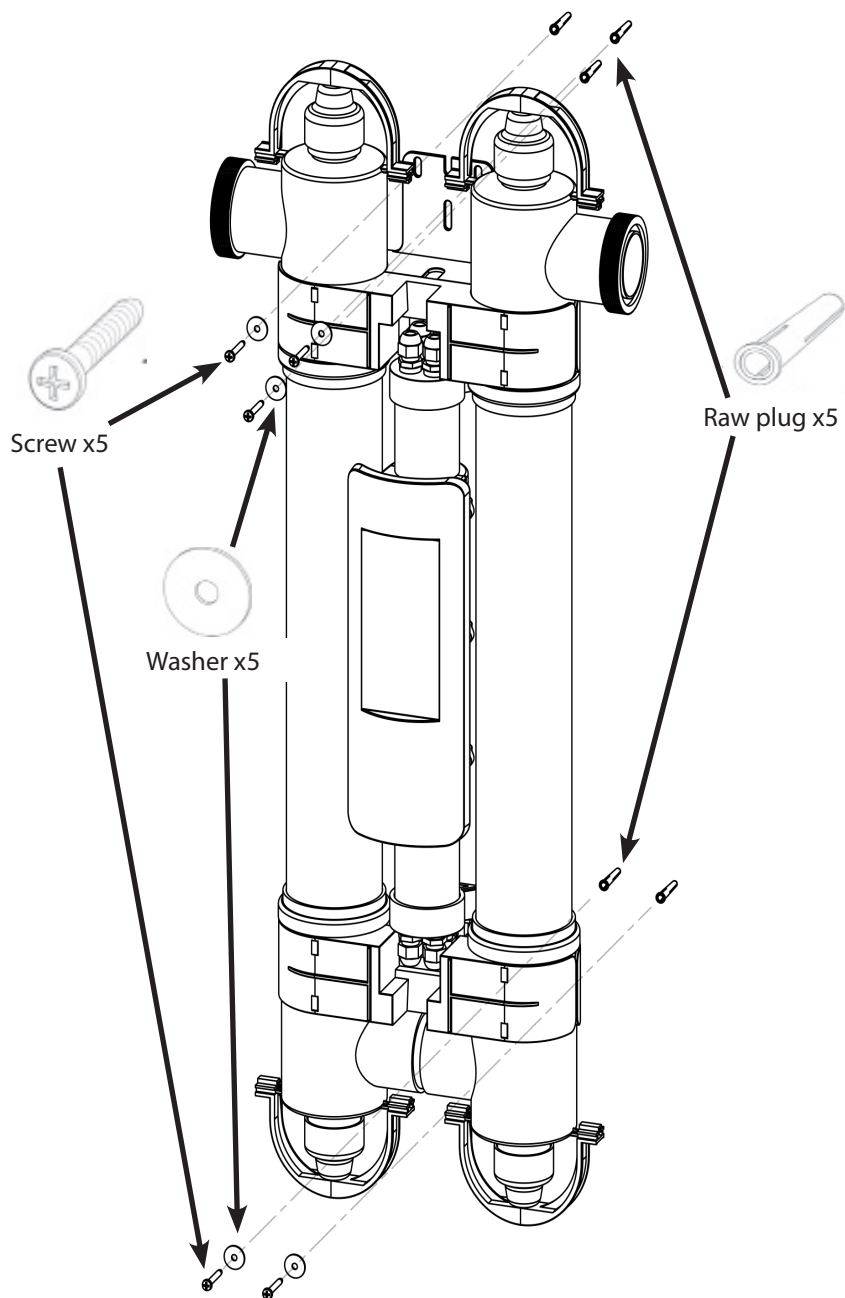
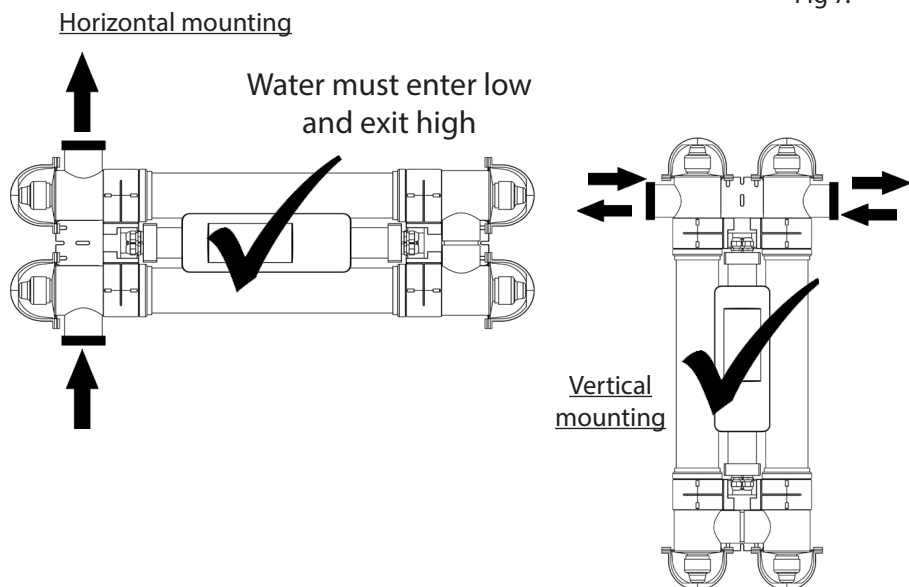


Fig 6.

110W Double Tube Unit

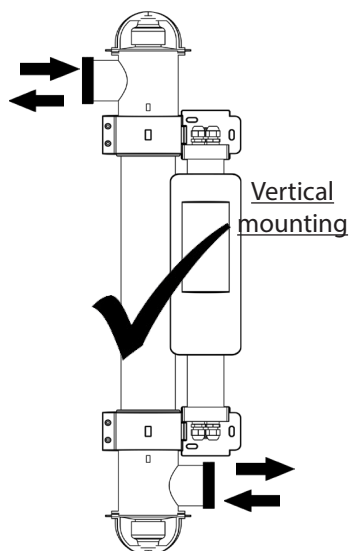
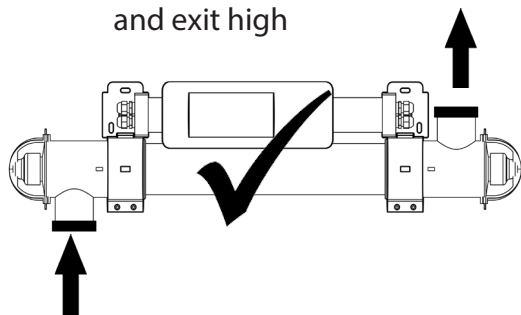
Fig 7.



55W Single Tube Unit

Horizontal mounting

Water must enter low and exit high

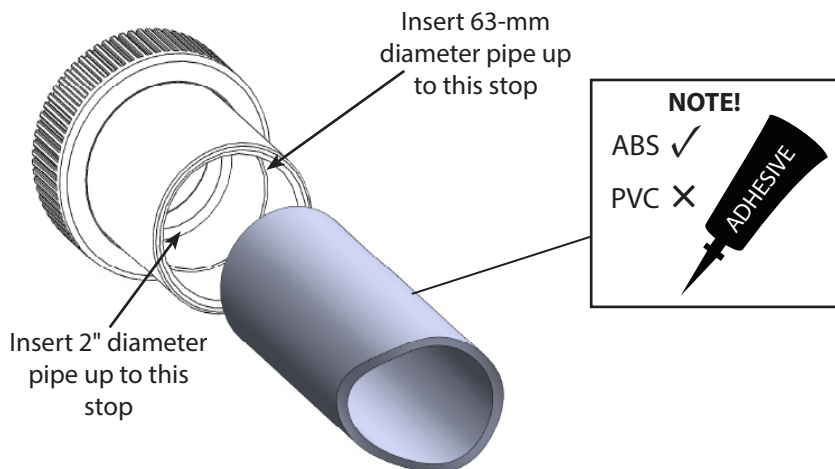


Connection to the water supply

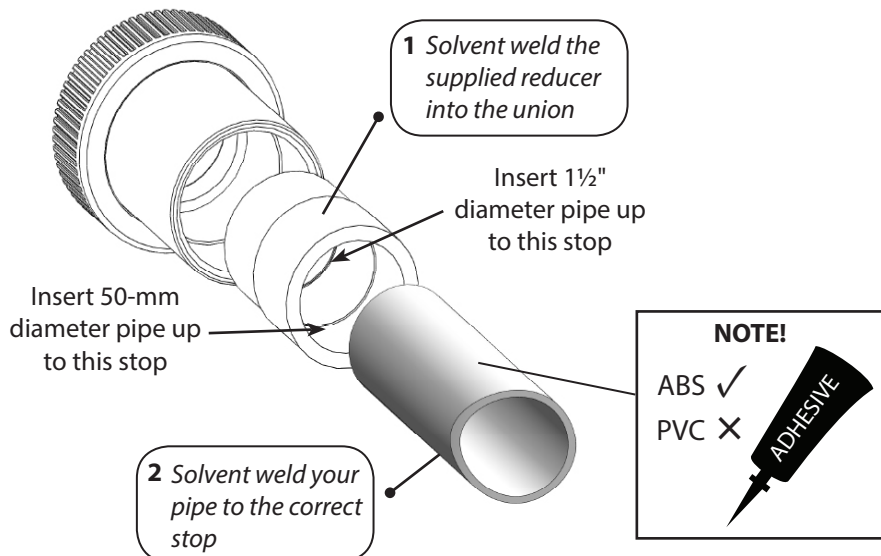
The unit is supplied with unions to allow connection to 2" or 63-mm rigid pipe. Reducers are also supplied to allow connection to 50-mm or 1½" rigid pipe - see fig. 8.

For connection to 63-mm or 2" diameter pipe

Fig 8.



For connection to 50-mm or 1½" diameter pipe



Flow Requirements

Minimum flow rate:

55W (single tube) and 110W (double tube) = 4m³/hour
(4,000 litres per hour)

Maximum flow rate:

55W (single tube) = 12m³/hour (12,000 litres per hour)

110W (double tube) = 24m³/hour (24,000 litres per hour)

Electrical connection

The unit must be installed in accordance with the country / regional requirements and regulations. Always disconnect all pool appliances from the mains electricity supply before servicing. In any event the work must be carried out by a qualified electrician, who will provide a certificate of conformity upon completion of the work.

The power supply must be fitted with a RCD with a rated residual operating current not exceeding 30mA. This unit must be installed inside a dry, weatherproof enclosure.

The unit is fitted with 5 metres of power cable. To prevent the unit inadvertently being dropped into the pool it must be securely positioned at least 3.5 metres from the edge of the pool.

The unit should be wired in such a way that it can only be energised when the swimming pool filtration pump is energised and running, **under no circumstances should the UV unit be energised without the flowing water being present.** Note: This is best achieved by wiring the H.R.UV-C unit into the output side of the filtration pump contactor.

Mains supply cable colour coding:

- Brown=Live
- Blue=Neutral
- Yellow/Green=Earth

Lamp Life Indicator

Under normal conditions the UV lamp(s) inside the unit have a usable life of 9,000 hours. The unit is fitted with a 'Lamp Life Indicator' LED in order to remind you to change the lamp(s) after this set period of time.

At initial 'Power On' of the H.R.UV-C the LED indicator will light in Red colour for one second to indicate that the time setting is 9,000 hours, and immediately change colour to Green to indicate that the timer has started.

When the timer reaches <500 hours the LED indicator will change colour from Green to Amber to indicate that the UV lamp(s) is getting near to its end of life. At this point replacement lamp(s) should be order from your distributor. When the timer reaches zero the LED indicator will change colour from Amber to Red, flashing slowly to signal that the UV lamp(s) should be changed.

After changing the UV lamp(s) the timer is reset by pressing and holding the reset button until the LED indicator goes 'Off' and then comes back 'On.' When the reset button is released the LED indicator will come back 'On' (Red colour for one second followed by Green colour), this indicates that the timer has restarted and is reset to count down the subsequent 9,000 hours.

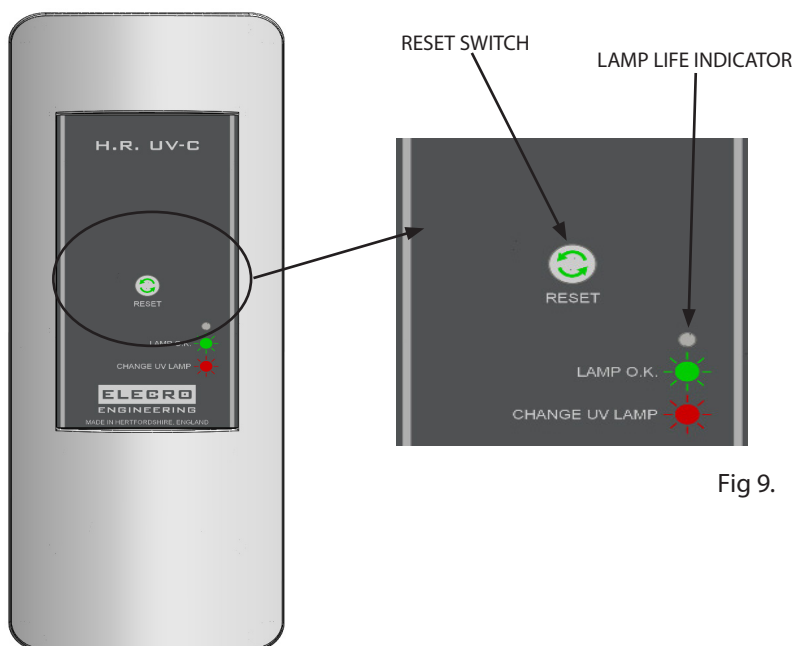


Fig 9.

Frost Protection

It is essential that the unit is protected from frost during the winter months, or disconnected from the water and electricity supply and stored inside a dry weather proof enclosure.

Lamp Replacement & Quartz Glass Cleaning

Isolate from the electrical and water supplies before carrying out any maintenance.

Lamp Holder restraint: A plastic lamp holder restraint is fitted at either end of each lamp chamber to prevent the lamp being accidentally removed while the unit is connected to the mains.

Each restraint is held in place with a self tapping screw. To carry out any routine maintenance these restraints must be removed, it is essential to re-attach them once the maintenance work has been completed. In time it may be necessary to replace the existing no. 6 size screw with a slightly larger size 8 screw.

To remove the lamp, carefully remove the blue lamp holder shroud, then pull the white plastic electrical end caps from the lamp end. Gently slide the lamp out ensuring that no pressure is applied to the glass quartz sleeve. Next, unscrew the two blue compression fittings located at either end of the main body and slide off the 'O' rings. Then slide out the quartz glass sleeve. Clean the sleeve and polish with a soft cloth or paper towel.

If you live in a hard water area there maybe some limescale on the quartz sleeve. This can be easily removed by soaking the sleeve in a proprietary kettle descaling solution (follow the manufacturer's instructions). Failure to remove the limescale will limit the effectiveness of the UV lamp(s).

Assembly process: Slide the clean, dry quartz glass sleeve into the unit. Ensure that you locate the 'O' rings carefully on the ends of the quartz. Failure to do so will result in leaks when the water is turned on. If you are carrying out the annual lamp change, use new 'O' rings. When you re-assemble the unit, ensure that the female threads on the compression fittings and the male threads on the main body are clean.

Wipe a little silicone grease or Vaseline (not silicone sealant) onto these threads. As these threads are only serviced periodically, this lubrication will help to prevent them binding together. Then refit and firmly hand tighten the compression fittings. Refit or replace the UV lamp(s) with a new one. Relocate the lamp holders and blue lamp holder shrouds ensuring that you match the correctly numbered lamp holder.

Note: Pinch the blue lamp holder shroud as you reassemble the unit to release any trapped air. Failure to release the trapped air may cause the lamp holder to disconnect from the lamp end. Reconnect and turn on the water supply to check for leaks before reconnecting the electric supply.

Important: The plastic body and blue compression fittings have been manufactured from polymers that have been specifically stabilised to protect them from the effects of the UVC emitted from the UV lamps. Despite this UV protection they will be eroded by a combination of the UVC and water flow. As a matter of course they should be inspected whenever a lamp change is carried out, to ensure they are not showing excessive wear and tear. Replacement parts are available.

RoHS Compliance Statement

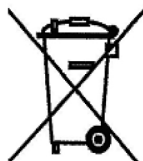
Elecro Engineering Limited certify that our UV Pool sanitiser range complies in accordance with RoHS Directive 2011/65/EU on the restriction of hazardous substances.

Waste of Electrical / Electronic Equipment

This product complies with EU directive 2012/19/EU

Do Not dispose of this product as unsorted municipal waste.

This symbol on the product or on its packaging indicates that this product should not be treated as household waste. Instead it should be handed over to the applicable collection point for the recycling of electrical and electronic equipment.



By ensuring this product is disposed of correctly you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources.

For more information please contact your local Civic office, your household waste disposal service or the retailer where you purchased the product.

Guarantee

Your H.R.UV-C pool sanitiser is guaranteed for 3 years* from the date of purchase against faulty workmanship and materials.

**regional variations apply*

The manufacturer will replace or repair, at it's discretion, any faulty units or components returned to the company for inspection.

Proof of purchase may be required. The manufacturer will not be liable in cases of incorrect installation of the product, inappropriate use, or neglect.

This guarantee does not include serviceable parts, ie: lamps, quartz sleeves and o-rings, etc.



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